

**BUREAU OF ENVIRONMENTAL REMEDIATION/REMEDIAL SECTION**

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**KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT  
DIVISION OF ENVIRONMENT  
Bureau of Environmental Remediation**

**GUIDE FOR THE  
STATE COOPERATIVE PROGRAM**

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# GUIDE FOR THE STATE COOPERATIVE PROGRAM

## BACKGROUND

The Kansas Department of Health and Environment (KDHE) Bureau of Environmental Remediation (BER) developed the State Cooperative Program in 1991 as a mechanism to facilitate the investigation, remediation, and monitoring of contaminated sites at the state level. The State Cooperative Program was developed as an alternative to the federal National Oil and Hazardous Substances Pollution Contingency Plan (NCP); however, the State Cooperative Program is not employed at Superfund sites or non-Superfund sites where potentially responsible parties (PRPs) desire consistency with the NCP. In 1994, KDHE and the United States Environmental Protection Agency (EPA) entered into a Cooperative Agreement initiating the State Deferral Program, which is modeled upon KDHE's State Cooperative Program. The Cooperative Agreement Work Plan documents EPA's assessment of KDHE's State Cooperative Program and determined that KDHE possesses the appropriate program capabilities to provide effective management of site investigations and clean-up activities and possesses capable staff to conduct PRP negotiations, litigation, technical oversight, as well as monitoring and public involvement activities. Accordingly, participation of a PRP within the State Cooperative Program promotes state and federal acceptance of investigative and remedial work performed.

## PURPOSE

The State Cooperative Program enables KDHE to implement a strong and effective remedial program that assures the protection of public health, safety, and the environment. The State Cooperative Program provides for a consistent and systematic process to address environmental contamination. The State Cooperative Program was developed to provide State-lead guidance, oversight, and determinations of successful completion for responsible party-lead investigative, preventive and/or corrective actions. A broad class of contaminated sites, excluding Superfund sites, leaking petroleum storage tank sites, dry-cleaner trust fund sites, Resource Conservation and Recovery Act (RCRA) Corrective Action sites, and landfill sites are managed by the State Cooperative Program. This State Cooperative Program Guide provides a description of the organizational framework supporting the program, a compendium of the program's essential elements and a compilation of critical documents employed by program staff to effectively administer the program.

The objectives of the State Cooperative Program include:

- to provide a systematic, consistent set of procedures for PRPs and their environmental consultants to investigate, remediate, and monitor KDHE-lead contaminated sites in Kansas;

- to develop and employ standardized legal documents, including Consent Orders, Interim Agreements, etc., to facilitate streamlined negotiations with consistent legal documents for various scopes of work to be performed throughout the State Cooperative Program process;
- to document and approve all activities performed pursuant to the State Cooperative Program process;
- to foster public awareness and involvement at all levels of the State Cooperative Program process; and
- to provide a mechanism to reclassify sites as resolved.

### BENEFITS

The State Cooperative Program was developed by KDHE/BER to provide an alternative investigative and remedial process to the cumbersome and rigidly structured federal National Contingency Plan. Participation within the State Cooperative Program provides assurance that the site will not be considered for listing on the National Priorities List or referred to EPA for future enforcement actions. Although the State Cooperative Program is similar to the federal National Contingency Plan, the process allows certain flexibility not accorded by the federal program. Program flexibility affords participants the opportunity to conduct activities to mitigate environmental impacts by performing expedited interim remedial measures. Additional flexibility is demonstrated by deferring the decision to perform a site-specific baseline risk assessment to the participants. Accordingly, the flexibility of the State Cooperative Program provides a measurable cost-benefit to its participants. The State Cooperative Program encourages state and local partnerships to address widespread contamination within a city or other governmental unit designation. Lastly, participation in the State Cooperative Program provides assurance that investigative and remedial activities performed will be accepted by the governing regulatory agency.

### AUTHORITY

General authority is provided for hazardous substance and solid waste investigation and clean-up in K.S.A. 65-3452a and K.S.A. 65-3401 et.seq. In addition, the Secretary of the Kansas Department of Health and Environment has general authority to "protect the water and soil of the state" under K.S.A. 65-161 et.seq.

## STATE COOPERATIVE PROGRAM PROCESS

### SITE IDENTIFICATION

Contaminated sites are routinely reported to the Kansas Department of Health Environment through a variety of sources. Means of site identification include: analysis of public water supplies; spills; citizen complaints; environmental audits performed on properties prior to, or as a part of, real property transactions; and by environmental investigations which identify unrelated or other sources of contamination. Sites with known or suspected environmental contamination are routinely investigated by KDHE/BER's Site Assessment Program to identify the source(s) of contamination and PRPs. A broad class of contaminated sites are managed by KDHE/BER's State Cooperative Program staff, with the exception of: EPA-lead Superfund sites, RCRA Corrective Action sites, leaking storage tank sites, dry-cleaner trust fund sites, and landfill sites, among others. Contaminated sites managed within the State Cooperative Program may include one or more potential contaminants of concern including, but not limited to: volatile organic compounds, semi-volatile organic compounds, pesticides, heavy metals, and inorganics such as nitrate, chlorides, etc.

### POTENTIALLY RESPONSIBLE PARTY IDENTIFICATION

Upon Agency disclosure of known or suspected environmental contamination, the investigation focuses upon identifying the source(s) and the associated potentially responsible parties (PRPs). KDHE/BER's Site Assessment Program performs environmental investigations of contaminated sites where the source(s) of environmental contamination and the associated PRPs are unknown. Information request letters are frequently employed by KDHE/BER staff to gather additional information. Upon successfully identifying a source of environmental contamination, a notice is mailed to the PRP documenting the necessity to perform additional investigative and/or remedial activity at the site through KDHE/BER's State Cooperative Program. The term, "potentially responsible party", may include a broad class of entities ranging from private individuals to large corporations and is legally defined within the federal Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA). In addition, certain state laws exist which to serve to identify entities which may be legally responsible for environmental contamination.

## LEGAL AGREEMENTS

Pursuant to K.S.A. 65-3453, all contaminated sites managed within the State Cooperative Program shall be addressed through legal agreements such as Consent Orders, Administrative Orders, Interim Agreements, or other legal documents. In an effort to maintain consistency, KDHE's legal staff have developed model legal documents which serve as the foundation from which all executed legal agreements originate. Essential elements common to all legal documents executed by KDHE include: description of the scope of work to be performed; schedules for the submission of work plans and reports, quality assurance/quality control measures, and a termination provision, among others.

## SCOPES OF WORK

In an effort to describe the investigative, remedial or other appropriate activities necessary to be performed at contaminated sites, various scopes of work have been developed by KDHE/BER State Cooperative Program staff. The appropriate scope of work to be performed at a given time is site-specific, dependent upon the availability of information previously collected, and is a function of the level of threat posed by the site. The scopes of work are general in nature and objective driven to provide flexibility between sites. The following is a listing of the various State Cooperative Program scopes of work, which are attached to this State Cooperative Program Guide, and a brief description of their applicability:

- **Preliminary Investigation** - In general, a Preliminary Investigation (PI) is performed at sites where environmental contamination is suspected. Investigative activities focus upon source identification, contaminant types, identifying affected media, and to determine the extent of contamination. In addition, a PI should identify source control or removal action opportunities, if appropriate.
- **Removal Action** - Removal action activities are performed at sites to abate, prevent, mitigate, eliminate, or stabilize the release or imminent threat of release of contaminants from a site.
- **Comprehensive Investigation** - Comprehensive Investigation (CI) activities are those actions necessary to determine the nature and full extent of contamination within each media at a site. Work performed during the CI is focused upon data collection in an effort to characterize site conditions, assess the risk to human health and the environment, and to evaluate potential corrective action alternatives to address site contamination.
- **Corrective Action Study** - A Corrective Action Study (CAS) is performed concurrent with the Comprehensive Investigation emphasizing data analysis collected during the CI to define corrective action goals, and to develop, screen and evaluate in detail potential

corrective action alternatives.

- **Corrective Action Plan** - Corrective Action Plan (CAP) activities are those actions performed subsequent to the selection of the appropriate corrective action. Corrective Action Plan activities include those necessary to prepare a conceptual design of the corrective action, and submission of plans and specifications for implementation of the corrective action. Such activities may include the performance of additional data collection to support the final design.
- **Corrective Action** - Corrective Action (CA) is the process of implementing, operating and monitoring the performance of the KDHE-approved corrective action plan.
- **Source Control** - Source Control activities are corrective action measures implemented at a site which may be differentiated by property boundaries, contaminant-of-concern, media, etc., to address "hot-spots" (i.e. highly contaminated areas within a property boundary).
- **Interim Remedial Measures** - Interim Remedial Measures are corrective action activities deemed necessary to implement prior to determining the final remedy for the site. Interim Remedial Measures should contribute to the efficient performance of any anticipated long-term remedial action.
- **Site Monitoring** - Site Monitoring may be an appropriate course of action for certain sites to confirm that corrective action goals have been attained for sites where corrective action has been previously implemented or where corrective action is not warranted.
- **Reclassification Plan** - For those sites where it is desired classify a site to resolved status, a Reclassification Plan is submitted to KDHE for approval which briefly summarizes all activities performed at the site and provides appropriate documentation that all corrective action goals have been attained over a set period of time.

Frequently, two or more scopes of work may be combined as levels of effort necessary to fulfill the terms of a legal agreement. The most common combinations for multiple scopes of work include: 1) Comprehensive Investigation/Corrective Action Study, or CI/CAS; and 2) Corrective Action Plan/Corrective Action, or CAP/CA. In an effort to illustrate the sequence or flow process for performing investigative or remedial activities within the State Cooperative Program, please refer to the three flow charts which are provided as attachments to the State Cooperative Program Guide. The State Cooperative Program flow chart illustrates the general process from site identification through site investigation and remedy selection to site reclassification. The Corrective Action flow chart illustrates the process for developing corrective action design plans through implementation, operation, and monitoring impacted environmental media to confirm attainment of corrective action goals. The third flow chart illustrates the process for Performance Evaluation of an implemented corrective action and/or Site Monitoring for post-Corrective Action

activities or simply monitoring a site to assure pre-determined remedial goals are met.

## PUBLIC INFORMATION PROGRAM

In an effort to foster public awareness and participation throughout the State Cooperative Program process, the KDHE site project manager must develop a site-specific public information strategy plan. The site-specific public information strategy plan identifies individuals or organizations which may be potentially affected by the site, including site workers, local residents, local governing bodies, media contacts, citizen groups, etc. The public information strategy plan describes certain activities which will be performed at various stages throughout the State Cooperative Program process to facilitate the transfer of information from KDHE to the affected community. Critical elements of the Public Information Program include public meetings such as availability sessions and/or public hearings. Availability sessions are generally informal and are designed to facilitate public access to the information and personnel associated with the project. Public hearings are relatively formal, which include a hearing officer and court reporter to document KDHE's effort to inform the public and solicit comments prior to determining the appropriate site-specific corrective action.

## REMEDIAL ACTION GOALS

Upon KDHE approval of site characterization, an evaluation is conducted to determine the necessity of site remediation. In general, remediation may be determined appropriate to safeguard human health or to protect valuable resources, such as drinking water supplies or surface water quality. In certain situations, site remediation is mandated to comply with state or federal laws that are either directly applicable, or relevant and appropriate (ARARs). Three classes of ARARs exist including: 1) chemical-specific ARARs, e.g. maximum contaminant levels (MCLs) established by the federal Safe Drinking Water Act; 2) action-specific ARARs, e.g. compliance with Resource Conservation and Recovery Act (RCRA) requirements; and 3) location-specific ARARs, e.g. preservation of historic sites or site location relative to a 100-year flood plain. Participants within the State Cooperative Program may elect to perform a site-specific risk assessment to determine the need for and extent of site remediation. In general, risk management decisions are based upon established federal risk management guidance, which recommend remedial response actions at sites where the excess human health risk exceeds one additional cancer incidence per ten-thousand reasonably maximum exposed individuals ( $1 \times 10^{-4}$ ), or where the risk hazard index exceeds one for non-carcinogenic compounds.

As an alternative to performing a site-specific risk assessment, KDHE has developed human health risk-based concentrations for certain chemicals in soils and ground water. For soils, KDHE/BER has developed Interim Remedial Guidelines (IRGs) which may be used on a site-by-site basis, subject to KDHE project manager authorization, exercising best professional judgement. The IRGs were developed to be protective of human health as defined by EPA for

residential and non-residential land uses; however, the chemical-specific concentrations may or may not be protective of ground water. For ground water, an assessment is performed to determine the most beneficial use of the aquifer. If the aquifer is a drinking water aquifer or a potential drinking water aquifer, chemical-specific MCL's are relevant and appropriate and generally serve as remedial action goals (see KDHE/BER Policy BER-RS-036). KDHE's Bureau of Water has developed human health risk based concentrations termed Kansas Action Levels (KALs) for many chemicals for which the federal Safe Drinking Water Act has not established MCLs. Similar to the IRGs, KALs may be used on a site-by-site basis subject to KDHE authorization. Alternatively, KDHE/BER may develop chemical-specific and site-specific Alternate Clean-up Levels (ACLs) using methodologies established through federal guidance which are determined to be adequately protective of human health.

### CORRECTIVE ACTION DECISIONS

Upon completion of the Comprehensive Investigation, Risk Assessment, if performed, and Corrective Action Study (CI/CAS), KDHE shall prepare the Draft Corrective Action Decision (CAD) which identifies the corrective action alternative preferred by KDHE. The Draft CAD is a document containing a brief summary of the site history, key findings of the Comprehensive Investigation, a description of the potential human health and environmental risks posed by the site, a listing of the corrective action goals, and a summary description of the various corrective action alternatives evaluated during the Corrective Action Study including a detailed description of the corrective action alternative preferred by KDHE.

Once the Draft Corrective Action Decision has been prepared and approved by KDHE management, KDHE announces the availability of the Draft CAD and encourages public comment to the Agency's Draft CAD. The availability of the Draft CAD and supporting documents (PI or CI report, risk assessment, CAS report, etc.) shall be announced through a public notice and press release within primary local news media. The public notice and press release serve to encourage public participation within the State Cooperative Program process by announcing a 30-day public comment period to submit written comments to the Draft Corrective Action Decision or to provide verbal comments to the Draft Corrective Action Decision during a public hearing sponsored by KDHE and conducted within the affected community. All comments received during the 30-day public comment period must be responded to by KDHE within the "Response to Comments Summary" section of the Final Corrective Action Decision document. Once the Final Corrective Action Decision document has been approved, a Declaration of Corrective Action Decision will be executed stating that the Corrective Action Decision is protective of human health and the environment.

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For additional information relative to the State Cooperative Program, please contact the Kansas Department of Health and Environment at (913) 296-1660 or (913) 296-1675.